

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the Official Action dated 5 April 2005. Responsive to the rejections made in the Official Action, Claims 1-3 and 6-21 have been amended to clarify the combination of elements which form the invention of the subject Patent Application.

In the Official Action, the Examiner rejected Claims 1-2, 4-5 and 8-21 under 35 U.S.C. § 103(a), as being obvious Islam, et al., U.S. Patent 5,950,230, in view of Talagala, et al., U.S. Patent 6,742,081. Claims 3 and 6-7 were rejected under 35 U.S.C. § 103(a), as being obvious over Islam, et al. in view of Talagala, et al. and Patel et al, U.S. Patent 6,799,284.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to an array configuration for a multiple disk-arrays system containing at least one disk array of a plurality of disks. Each disk has an array configuration sector that includes an array signature field for identifying the disk as being in the disk array or in a span array. The sector also includes an array information field for recording at least one setting and at least one status of the disk array. The sector includes a disk information field for recording at least one information in the disk. The sector further includes a plurality of serial check sum fields respectively corresponding to all of the disks of the disk array. Each of the

plurality of checksum fields is respectively based on information in the disk information field of a corresponding one of the plurality of disks of the disk array.

From another aspect, the invention of the subject Patent Application is directed to an array configuration for a multiple disk-arrays system containing at least one disk array of a plurality of disks. Each disk has an array configuration sector that includes an array signature field for identifying a disk in the disk array or in a span array and an array information field for recording at least one setting and at least one status of the disk array. The sector also includes a disk information field for recording at least one information in said disk. Further, the sector includes a plurality of first serial check sum fields respectively corresponding to all of the disks of the disk array. Each of said plurality of first check sum fields is respectively based on a model number, a serial number, and a firmware revision number in the disk information field of a corresponding one the disks in said disk array. The sector includes a second checksum field based on said fields of said array configuration sector.

In contradistinction, the Islam reference is directed to a disk drive managing system for a single drive array. The reference discloses storing configuration data in the last few sectors of the disk. However, as admitted by the Examiner, the reference is silent as to the inclusion of checksum fields. Therefore, nowhere does the reference disclose or suggest the array configuration sector including a plurality of serial check sum fields respectively corresponding to all of

the disks of the disk array. Nor does the reference disclose or suggest a second checksum field based on the fields of said array configuration sector, as now claimed.

The Talagala, et al. reference does not overcome the deficiencies of Islam, et al. The Talagala, et al. reference is directed to a data storage array employing block checksums and dynamic stripping. The reference discloses a storage system may include a plurality of devices which are addressed through a plurality of map entries to correlate virtual addresses to a physical address on the storage device, with each map entry including a checksum for data stored in the address. However, nowhere does the reference disclose a configuration sector of each disk that includes the checksums for all of the disks of the array. Nor does the reference disclose or suggest a plurality of first serial check sum fields respectively corresponding to all of the disks of the disk array, each of the plurality of first check sum fields being respectively based on a model number, a serial number, and a firmware revision number in the disk information field of a corresponding one the disks in the disk array, and a second checksum field based on the fields of said array configuration sector, as now claimed.

Therefore, as neither Islam, et al. nor Talagala, et al. disclose or suggest the combination of elements which form the invention of the subject Patent Application, they cannot in combination make that invention obvious.

The Patel et al. reference does not overcome the deficiencies of Islam, et al. combined with Talagala, et al. The Patel et al. reference is directed to a method and system for reducing RAID parity computation. The Examiner points out that the reference discloses the need for keeping track of the version number, when storage from a RAID array is moved from one filer to another. However, nowhere does the reference disclose or suggest the array configuration sector including a plurality of serial check sum fields respectively corresponding to all of the disks of the disk array or a second checksum field based on the fields of said array configuration sector, as now claimed.

Therefore, as none of Islam, et al., Talagala, et al. and Patel et al. disclose or suggest the combination of elements which form the invention of the subject Patent Application, they cannot in combination make that invention obvious.

For all of the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectfully requested.

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